



## The implications of climate policy for avoided impacts on water scarcity

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### Abstract:

We present simulations of the impact of climate change on global water scarcity for five greenhouse gas emissions mitigation policy scenarios and compare them with a business-as-usual emissions scenario. A global water scarcity model is driven by climate change projections from 21 global climate models (GCMs). An aggressive policy scenario that gives a 50% chance of avoiding a 2 °C global-mean temperature rise from pre-industrial times could avoid almost 40% of the business as usual global impacts by 2100. However, mitigation policy does not completely eliminate the impacts of climate change. For any given GCM, the avoided impacts are affected more by the year at which emissions peak than to the rate at which emissions are subsequently reduced and the uncertainty across the 21 forcing GCMs is large.

**Source:** Ask your librarian to help locate this item.

### Resource Description

#### Climate Scenario :

specification of climate scenario (set of assumptions about future states related to climate)

Special Report on Emissions Scenarios (SRES), Other Climate Scenario

**Special Report on Emissions Scenarios (SRES) Scenario:** SRES A1

**Other Climate Scenario:** A1B

#### Communication:

resource focus on research or methods on how to communicate or frame issues on climate change;  
surveys of attitudes, knowledge, beliefs about climate change

A focus of content

#### Communication Audience:

audience to whom the resource is directed

Policymaker

#### Exposure :

weather or climate related pathway by which climate change affects health

Food/Water Security

**Geographic Feature:** 

resource focuses on specific type of geography

Freshwater

**Geographic Location:** 

resource focuses on specific location

Global or Unspecified

**Health Co-Benefit/Co-Harm (Adaption/Mitigation):** 

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

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**Health Impact:** 

specification of health effect or disease related to climate change exposure

Health Outcome Unspecified

**Intervention:** 

strategy to prepare for or reduce the impact of climate change on health

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**Mitigation/Adaptation:** 

mitigation or adaptation strategy is a focus of resource

Adaptation, Mitigation

**Model/Methodology:** 

type of model used or methodology development is a focus of resource

Exposure Change Prediction

**Resource Type:** 

format or standard characteristic of resource

Policy/Opinion, Research Article

**Socioeconomic Scenario:** SES scenarios

**Timescale:** 

time period studied

Long-Term (>50 years)

**Vulnerability/Impact Assessment:** 

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

# Climate Change and Human Health Literature Portal

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